

Attorney Docket No. P10334

AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Previously Presented) A multi-codebook fixed bitrate CELP signal block encoding/decoding method, including the steps of:

selecting, for each signal block, a corresponding excitation codebook identification from a pre-determined, signal block independent sequence of codebook identifications; and

encoding/decoding each signal block by using an excitation codebook having said selected excitation codebook identification.

2. (Previously Presented) The method of claim 1, including the steps of providing several sets of excitation codebooks;

determining, for each signal block, a corresponding set of excitation codebooks based on previously determined values of other signal block characterizing parameters;

selecting, for each signal block, a corresponding excitation codebook identification in the determined set utilizing a deterministic selection procedure that is independent of signal type; and

encoding/decoding each signal block by using an excitation codebook from said determined set having said selected excitation codebook identification.

3. (Previously Presented) The method of claim 1, including the steps of

selecting, for each signal block, a corresponding excitation codebook identification utilizing a deterministic selection procedure that is independent of signal type;

providing several sets of excitation codebooks;

Amendment - PAGE 2 of 9

EUS/JIP/03-8895

Attorney Docket No. P10334

determining, for each signal block, a corresponding set of excitation codebooks based on previously determined values of other signal block characterizing parameters; and

encoding/decoding each signal block by using an excitation codebook from said determined set having said selected excitation codebook identification.

4. (Original) The method of claim 2 or 3, wherein said other parameters are channel protected.

5. (Original) The method of claim 4, wherein only parts of said channel protected parameters that allow error detection are used.

e1 6. (Previously Presented) The method of claim 1, 2, or 3, wherein said pre-determined signal block independent sequence of codebook identifications is defined by cyclically stepping through each excitation codebook identification.

7. (Previously Presented) The method of claim 1, 2, or 3, wherein said deterministic selection procedure is defined by randomly stepping through each excitation codebook identification in said sets of excitation codebooks.

8. (Previously Presented) The method of claim 1, wherein said excitation codebooks are fixed excitation codebooks.

9. (Previously Presented) The method of claim 8, wherein said excitation codebooks are algebraic excitation codebooks.

10. (Original) The method of claim 1, wherein said signal block is an audio frame.

11. (Original) The method of claim 1, wherein said signal block is an audio subframe.

Amendment - PAGE 3 of 9
EUS/J/P/03-8995

Attorney Docket No. P10334

12. (Previously Presented) A multi-codebook fixed bitrate CELP signal block encoder/decoder, including:

an excitation codebook selector for selecting, for each signal block, a corresponding excitation codebook identification from a pre-determined, signal block independent sequence of codebook identifications; and

means for encoding/decoding each signal block by using an excitation codebook having said selected excitation codebook identification.

13. (Previously Presented) The encoder/decoder of claim 12, including several sets of excitation codebooks;

a set selector for determining, for each signal block, a corresponding set of excitation codebooks, based on previously determined values of other signal block characterizing parameters;

an excitation codebook selector for selecting, for each signal block, a corresponding excitation codebook identification in the determined set utilizing a deterministic selection procedure that is independent of signal type; and

means for encoding/decoding each signal block by using an excitation codebook from said determined set having said selected excitation codebook identification.

14. (Previously Presented) The encoder/decoder of claim 12, including

an excitation codebook selector for selecting, for each signal block, a corresponding excitation codebook identification utilizing a deterministic selection procedure that is independent of signal type;

several sets of excitation codebooks;

a set selector for determining, for each signal block, a corresponding set of excitation codebooks based on previously determined values of other signal block characterizing parameters; and

means for encoding/decoding each signal block by using an excitation codebook from said determined set having said selected codebook identification.

Attorney Docket No. P10334

15. (Previously Presented) The encoder/decoder of claim 12, 13, or 14, wherein said excitation codebook selector cyclically steps through each excitation codebook identification.

16. (Previously Presented) The encoder/decoder of claim 12, 13, or 14, wherein said excitation codebook selector pseudo-randomly steps through each excitation codebook identification.

17. (Previously Presented) The encoder/decoder of claim 12, wherein said excitation codebooks are fixed codebooks.

18. (Previously Presented) The encoder/decoder of claim 17, wherein said excitation codebooks are algebraic excitation codebooks.

21 19. (Previously Presented) An excitation codebook selection method for multi-codebook fixed bitrate CELP signal block encoding/decoding, including the step of:
selecting, for each signal block, a corresponding excitation codebook identification from a pre-determined, signal block independent sequence of codebook identifications, said codebook identification identifying a particular excitation codebook.

20. (Previously Presented) The method of claim 19, wherein said pre-determined signal block independent sequence of codebook identifications is defined by cyclically stepping through each excitation codebook identification.

21. (Previously Presented) The method of claim 19, wherein said pre-determined signal block independent sequence of codebook identifications is defined by pseudo-randomly stepping through each excitation codebook identification.

22. (Previously Presented) A codebook selection apparatus for multi-codebook fixed bitrate CELP signal block encoding/decoding, including:

Attorney Docket No. P10334

an excitation codebook selector for selecting, for each signal block, a corresponding excitation codebook identification from a pre-determined, signal block independent sequence of codebook identifications, said excitation codebook identification identifying a particular excitation codebook.

e1 23. (Previously Presented) The encoder/decoder of claim 22, wherein said codebook selector cyclically steps through each excitation codebook identification.

24. (Previously Presented) The encoder/decoder of claim 22, wherein said excitation codebook selector pseudo-randomly steps through each excitation codebook identification.

25. (Canceled)

26. (Canceled)
